

**RAMAN RESEARCH INSTITUTE  
BANGALORE 560080**

**Advt., No.3 / 2020**

The Raman Research Institute, funded by the Government of India, is a premier institute engaged in research in basic sciences. More information about the Institute, the fields of research, and other details can be viewed at its website [www.rrri.res.in](http://www.rrri.res.in).

Applications are invited for **TWO POSTS of RESEARCH ASSISTANT (RA) on a temporary basis for the ULTRAFAST AND NONLINEAR OPTICS (UNO) lab** in the Light and Matter Physics (LAMP) Group of the Institute for a period of one year / extendable to second year depending upon the candidate's performance. The candidate will be associated with the **UNO lab of the Institute**. We seek motivated individuals with an excellent academic background with an aptitude to master the functioning and use of scientific equipment and eagerness to learn new experimental techniques. Details of the required qualifications and experience are given below:

**Job Description:**

**RA 1:** Generation and investigation of laser-produced plasmas.

**RA 2:** Nonlinear optical studies in novel materials.

**Brief Summary of the Projects**

**Laser-produced plasmas:** Plasmas can be generated from various targets by irradiating them with powerful laser beams. The plasma thus formed can be investigated in detail using optical and electrical techniques. These studies lead to a plethora of applications including trace element analysis. The RA will be required to carry out planned experiments and analyze the results for publication.

**Nonlinear optical studies:** Nonlinear Optics has multiple applications including optical frequency conversion, generation of short and ultrashort laser pulses, and protection of sensitive light detectors from laser-induced damage. The RA will be required to carry out planned experiments in novel materials and analyze the results for publication.

**Remuneration:** A consolidated remuneration of Rs. 23,500/- per month at commencement + HRA (24% of consolidated remuneration) will be paid to the selected candidates. An increment of Rs.1000/- will be provided in the second year.

**Essential Qualification:**

- Post graduate degree in Physics/Photonics or graduate degree in Electronics/Electrical/Photonics/Optical Engineering with a minimum of 70 % marks or 7.0 CGPA.

- At least six months' experience in doing experimental projects using lasers as light sources.

**Desirable:** It will be desirable if the candidate (i) has good computing and programming skills, and (ii) is familiar with laser based spectroscopy experiments in nonlinear optics and/or laser-produced plasmas.

**Upper Age Limit:** The upper limit is **28** years as on the last date for closing of applications. The last date for receipt of applications is **22<sup>nd</sup> Dec. 2020**. Applications received after the last date will not be considered.

### **General Information:**

- (i) Age relaxation will be applicable as per Govt., of India rules for the candidates belonging to SC/ST/OBC/PWD categories.
- (ii) The institute reserves the right to restrict the number of candidates for test/ interview to a reasonable limit, on the basis of relevant qualification and experience higher than the minimum prescribed in the advertisement.
- (iii) Mere fulfilling the essential and desired qualifications will not entitle an applicant to be called for interview.
- (iv) The institute reserves the right to relax any of the above requirements in exceptional cases.
- (v) The Institute reserves the right not to fill the post herein advertised.
- (vi) Canvassing in any form shall disqualify the candidate.

### **How to apply:**

Applications are to be sent in a sealed cover with “**RA application to the UNO Lab**” written clearly on the envelope to **The Coordinator, Light and Matter Physics Group, Raman Research Institute, C.V Raman Avenue, Sadashivanagar, Bangalore – 560080, OR by email to savithamd@rri.res.in with Advertisement No. and “RA to UNO lab”** written in the subject line.

**Application format** (1) Name of the applicant; (2) Date of Birth; (3) Nationality; (4) Whether belonging to SC/ST/OBC; (5) Permanent Address; (6) Address for correspondence (Please provide your mobile number and email-id); (7) Qualifications starting from SSC/X Std. upwards (please attach copies of certificates and marks cards); (8) Research/Work Experience with details of organization, post held, duration of service, and emoluments drawn (attach certificates), (9) References of individuals (with phone number and email ID) who are familiar with you and your work, whom the Institute could contact for referral letters; and (10) a brief statement (not more than one page) typed in double line spacing, as to what motivates you to apply for the above post.